AMENDMENT OF SOLICITATION / MODIFICATION OF CONTRACT

1. Contract ID Code	PAGE
	1 OF 1

2.Amendment/Modification No.	3. EFFECTIVE DATE	4. REQUISITION / PURCHASE REQUEST	5. Project No. (if applicable)
0004	21 MAY 02	N66001-2030-62101	

6. ISSUED BY	CODE	7. ADMINISTERED BY (If other than Item 6)	CODE
CONTRACTING OFFICER, SPAWARSYSCEN BLDG A33 ROOM 1602W, Code 2212 53560 HULL STREET SAN DIEGO, CA 92152-5000 JACK FAULKNER (619)553-4503 email: jfaulk@spawar.navy.mil	N66001		N66001

8. NAME AND ADDRESS OF CONTRACTOR (No., street, county, state and ZIP + 4 Code)	(X)	9a. Amendment of Solicitation No.
		N66001-02-R-5999
	X	9b. Dated *(See Item 11)*
		22 MAR 02
		10a. Modification of Contract / Order No.
		/
		10b. Dated *(See Item 11)*
CAGE CODE / CEC (facility) CODE		

11. THIS ITEM APPLIES ONLY TO AMENDMENTS OF SOLICITATIONS

[X] The above numbered solicitation is amended as set forth in Item 14. The hour and date specified for receipt of Offers [ ] is extended [X] is not extended.

Offers must acknowledge receipt of this amendment prior to the hour and date specified in the solicitation or as amended, by one of the following methods: (a) By completing Items 8 and 15, and returning 1 copies of the amendment; (b) By acknowledging receipt of this amendment on each copy of the offer submitted; or (c) By separate letter or telegram which includes a reference to the solicitation and amendment numbers. FAILURE OF YOUR ACKNOWLEDGMENT TO BE RECEIVED AT THE PLACE DESIGNATED FOR RECEIPT OF OFFERS PRIOR TO THE HOUR AND DATE SPECIFIED MAY RESULT IN REJECTION OF YOUR OFFER. If by virtue of this amendment you desire to change an offer already submitted, such change may be made by telegram or letter, provided each telegram or letter makes reference to the solicitation and this amendment, and is received prior to the opening hour and date specified.

12. ACCOUNTING AND APPROPRIATION DATA *(If required)*

13. THIS ITEM APPLIES ONLY TO MODIFICATIONS OF CONTRACTS/ORDERS, IT MODIFIES THE CONTRACT/ORDER NO. AS DESCRIBED IN ITEM 14.

(X)	A. THIS CHANGE ORDER IS ISSUED PURSUANT TO: *(Specify authority)* THE CHANGES SET FORTH IN ITEM 14 ARE MADE IN THE CONTRACT ORDER NO. IN ITEM 10A.
	B. THE ABOVE NUMBERED CONTRACT/ORDER IS MODIFIED TO REFLECT THE ADMINISTRATIVE CHANGES *(such as changes in paying office, appropriation data, etc..)* SET FORTH IN ITEM 14, PURSUANT TO THE AUTHORITY OF FAR 43.103(b).
	C. THIS SUPPLEMENTAL AGREEMENT IS ENTERED INTO PURSUANT TO AUTHORITY OF:
	D. OTHER *(Specify type of modification and authority)*

E. IMPORTANT: Contractor [ ] Is Not, [ ] Is required to sign this document and return copies to the issuing office.

14. DESCRIPTION OF AMENDMENT/MODIFICATION *(Organized by UCF section headings, including solicitation/contract subject matter where feasible.)*

The solicitation is revised as follows:
1) Solicitation pages 4,6,8,9,10,11,12,47,48,79,85 and 88 are replaced with the attached pages.
2) Attachment 1, pages 9 and 14 are replaced with the attached pages.
3) Attachment 4, pages 4, 5, material list and enclosure 1 replacement pages are replaced with the attached pages.
4) Offerors shall be responsible for the pick up, return and any damage to the government furnished equipment provided under this solicitation.
5) The attached questions, answers and its attachment are for informational purposes only and are not changes to the solicitation.
All other solicitation provisions remain unchanged.

Except as provided herein, all terms and conditions of the document referenced in Item 9A or 10A, as heretofore changed, remains unchanged and in full force and effect.

15A. NAME AND TITLE OF SIGNER *(Type or print)*		16A. NAME OF CONTRACTING OFFICER *(Type or print)*	
		SHARON M. PRITCHARD	
15B. NAME OF CONTRACTOR BY _____ *(Signature of person authorized to sign)*	15C. Date Signed	16B. UNITED STATES OF AMERICA BY _____ *(Signature of Contracting Officer)*	16C. Date Signed

0020	Pre-planned Product Improvement IAW SOW 3.10.4		01	***UNPRICED***
0021	Materials		01	_____
0022	Travel/PER DIEM Handling,		01	_____
0023	DATA FOR ITEM(S) IAW Contract Data Requirements List, (CDRL), Exhibit(s) "A"	1 LOT	NSP	NSP

OPTION CONTRACT LINE ITEM NUMBERS

The Government shall have the option to purchase the following CLINs in accordance with FAR 52.217-7 "Option for Increased Quantity-Separately Priced Line Item" on a **fixed-price** basis. The Government shall have the option to purchase the following CLINs in accordance with FAR 52.217-9 "Option to Extend the Term of the Contract" on a **Time and Materials** basis.

The Government shall have the option to purchase the following CLINs in accordance with FAR 52.217-9.

OPTION I

CLIN	DESCRIPTION	MAXQTY	UNIT	UNIT PRICE	TOTAL AMT
0024	High Performance Modem & IAW SOW Related Interface Equipment	60	EA	_____	_____
0025	Equipment (operator/technical) Manual SOW para. 3.6.1	60	EA	NSP	NSP
0026	Standard Equipment Warranty 24 months after Govt. Accept.	60	EA	NSP	NSP
0027	~~30~~ 12 month extension on the standard equipment warranty	20	EA	_____	_____
0028	High Performance Modem	10	EA	--------	--------
0029	Related Interface Equipment	10	EA	--------	--------

TOTAL AMOUNT FOR CLIN 0041 $_____

0042 LABOR: in accordance with SOW 3.10, OVERTIME:

Program Manager	10	M/H	--------	--------
Electronic Engineer	20	M/H	--------	--------
Electronic Technician	80	M/H	--------	--------
Design Engineer	10	M/H	--------	--------
Electronic Test Technician	20	M/H	--------	--------
Quality Assurance	10	M/H	--------	--------
Material Purchase Manager	04	M/H	--------	--------
Packing Specialist	04	M/H	--------	--------
Administrative Support	02	M/H	--------	--------
Draftsman	04	M/H	--------	--------

TOTAL AMOUNT FOR CLIN 0042 $_____

0043	Pre-planned Product Improvement IAW SOW 3.10.4	~~01~~30		***UNPRICED***
0044	Materials	01		_____
0045	Travel/PER DIEM Handling,	01		_____
0046	DATA FOR ITEM(S) IAW Contract Data Requirements List, (CDRL), Exhibit(s) "A"	1 LOT	NSP	NSP

OPTION II

CLIN	DESCRIPTION	MAXQTY	UNIT	UNIT PRICE	TOTAL AMT
0047	High Performance Modem & IAW SOW Related Interface Equipment	60	EA	_____	_____
0048	Equipment (operator/technical) Manual SOW para. 3.6.1	60	EA	NSP	NSP
0049	Standard Equipment Warranty 24 months after Govt. Accept.	60	EA	NSP	NSP
0050	~~30~~ 12 month extension on the standard equipment warranty	20	EA	_____	_____

Quality Assurance	40	M/H	--------	--------
Material Purchase Manager	20	M/H	--------	--------
Packing Specialist	40	M/H	--------	--------
Administrative Support	120	M/H	--------	--------
Draftsman	40	M/H	--------	--------

TOTAL AMOUNT FOR CLIN 0064 $_____

0065 LABOR: in accordance with SOW 3.10, OVERTIME:

Program Manager	10	M/H	--------	--------
Electronic Engineer	20	M/H	--------	--------
Electronic Technician	80	M/H	--------	--------
Design Engineer	10	M/H	--------	--------
Electronic Test Technician	20	M/H	--------	--------
Quality Assurance	10	M/H	--------	--------
Material Purchase Manager	04	M/H	--------	--------
Packing Specialist	04	M/H	--------	--------
Administrative Support	02	M/H	--------	--------
Draftsman	04	M/H	--------	--------

TOTAL AMOUNT FOR CLIN 0065 $_____

0066	Pre-planned Product Improvement IAW SOW 3.10.4	~~01~~30		***UNPRICED***
0067	Materials	01		_____
0068	Travel/PER DIEM Handling,	01		_____
0069	DATA FOR ITEM(S) IAW Contract Data Requirements List, (CDRL), Exhibit(s) "A"	1 LOT	NSP	NSP

OPTION III

CLIN	DESCRIPTION	MAXQTY	UNIT	UNIT PRICE	TOTAL AMT
0070	High Performance Modem & IAW SOW Related Interface Equipment	60	EA	_____	_____

0071	Equipment (operator/technical) Manual SOW para. 3.6.1	60	EA	NSP	NSP
0072	Standard Equipment Warranty 24 months after Govt. Accept.	60	EA	NSP	NSP
0073	~~30~~ 12 month extension on the standard equipment warranty	20	EA	_____	_____
0074	High Performance Modem	10	EA	--------	--------
0075	Related Interface Equipment	10	EA	--------	--------
0076	90 Day Spares Kit IAW SOW para 3.4.1	18	EA	--------	--------
0077	One Year Spares Kit IAW SOW para 3.4.2	12	EA	--------	--------
0078	Factory Spares Kit IAW SOW para 3.4.3	6	EA	--------	--------
0079	Commercial Manual supplemental data IAW SOW para. 3.6.2	60	EA	------	--------
0080	Organizational Maintenance Training SOW para. 3.7.3	60	EA	--------	--------
0081	Maintenance Training CD IAW SOW para 3.7.3.1	0	EA	--------	--------
0082	Organizational Operator Training IAW SOW para 3.7.4	60	EA	--------	--------
0083	Operator Training CD IAW SOW para 3.7.4.1	0	EA	--------	--------
0084	Factory Operator/Maintenance Training IAW SOW para. 3.7.5	4	EA	--------	--------
0085	High Performance Modem & Related Interface Equipment Hook-up Support IAW SOW para. 3.8.1	60	EA	--------	--------
0086	Saturn-Bm Terminal/Antenna hand-over Non-Manufactures Warranty IAW Section H	10	EA	--------	--------

The contractor shall provide the following on a **Time & Materials** basis:

0087 LABOR: in accordance with SOW 3.10, REGULAR TIME:

Program Manager	40	M/H	--------	--------
Electronic Engineer	80	M/H	--------	--------
Electronic Technician	480	M/H	--------	--------
Design Engineer	40	M/H	--------	--------
Electronic Test Technician	80	M/H	--------	--------
Quality Assurance	40	M/H	--------	--------
Material Purchase Manager	20	M/H	--------	--------
Packing Specialist	40	M/H	--------	--------
Administrative Support	120	M/H	--------	--------
Draftsman	40	M/H	--------	--------

TOTAL AMOUNT FOR CLIN 0087 $_____

0088 LABOR: in accordance with SOW 3.10, OVERTIME:

Program Manager	10	M/H	--------	--------
Electronic Engineer	20	M/H	--------	--------
Electronic Technician	80	M/H	--------	--------
Design Engineer	10	M/H	--------	--------
Electronic Test Technician	20	M/H	--------	--------
Quality Assurance	10	M/H	--------	--------
Material Purchase Manager	04	M/H	--------	--------
Packing Specialist	04	M/H	--------	--------
Administrative Support	02	M/H	--------	--------
Draftsman	04	M/H	--------	--------

TOTAL AMOUNT FOR CLIN 0088 $_____

0089	Pre-planned Product Improvement IAW SOW 3.10.4	~~0~~130	***UNPRICED***
0090	Materials	01	_____
0091	Travel/PER DIEM Handling,	01	_____
0092	DATA FOR ITEM(S) IAW Contract Data Requirements List, (CDRL), Exhibit(s) "A"	1 LOT NSP	NSP

OPTION IV

CLIN	DESCRIPTION	MAXQTY	UNIT	UNIT PRICE	TOTAL AMT
0093	High Performance Modem & IAW SOW Related Interface Equipment	60	EA	_____	_____
0094	Equipment (operator/technical) Manual SOW para. 3.6.1	60	EA	NSP	NSP
0095	Standard Equipment Warranty 24 months after Govt. Accept.	60	EA	NSP	NSP
0096	~~30~~ 12 month extension on the standard equipment warranty	20	EA	_____	_____
0097	High Performance Modem	10	EA	--------	--------
0098	Related Interface Equipment	10	EA	--------	--------
0099	90 Day Spares Kit IAW SOW para 3.4.1	18	EA	--------	--------
0100	One Year Spares Kit IAW SOW para 3.4.2	12	EA	--------	--------
0101	Factory Spares Kit IAW SOW para 3.4.3	6	EA	--------	--------
0102	Commercial Manual supplemental data IAW SOW para. 3.6.2	60	EA	------	--------
0103	Organizational Maintenance Training SOW para. 3.7.3	60	EA	--------	--------
0104	Maintenance Training CD IAW SOW para 3.7.3.1	0	EA	--------	--------
0105	Organizational Operator Training IAW SOW para 3.7.4	60	EA	--------	--------
0106	Operator Training CD IAW SOW para 3.7.4.1	0	EA	--------	--------
0107	Factory Operator/Maintenance Training IAW SOW para. 3.7.5	4	EA	--------	--------

0108	High Performance Modem & Related Interface Equipment Hook-up Support IAW SOW para. 3.8.1	60	EA	--------	--------
0109	Saturn-Bm Terminal/Antenna hand-over Non-Manufactures Warranty IAW Section H	10	EA	--------	--------

The contractor shall provide the following on a **Time & Materials** basis:

0110 LABOR: in accordance with SOW 3.10, REGULAR TIME:

Program Manager	40	M/H	--------	--------
Electronic Engineer	80	M/H	--------	--------
Electronic Technician	480	M/H	--------	--------
Design Engineer	40	M/H	--------	--------
Electronic Test Technician	80	M/H	--------	--------
Quality Assurance	40	M/H	--------	--------
Material Purchase Manager	20	M/H	--------	--------
Packing Specialist	40	M/H	--------	--------
Administrative Support	120	M/H	--------	--------
Draftsman	40	M/H	--------	--------

TOTAL AMOUNT FOR CLIN 0110 $_____

0111 LABOR: in accordance with SOW 3.10, OVERTIME:

Program Manager	10	M/H	--------	--------
Electronic Engineer	20	M/H	--------	--------
Electronic Technician	80	M/H	--------	--------
Design Engineer	10	M/H	--------	--------
Electronic Test Technician	20	M/H	--------	--------
Quality Assurance	10	M/H	--------	--------
Material Purchase Manager	04	M/H	--------	--------
Packing Specialist	04	M/H	--------	--------
Administrative Support	02	M/H	--------	--------
Draftsman	04	M/H	--------	--------

TOTAL AMOUNT FOR CLIN 0111 $_____

0112	Pre-planned Product Improvement IAW SOW 3.10.4	~~0~~/0130	***UNPRICED***
0113	Materials	01	_____

H-356. SUBMISSION OF INTERIM AND FINAL INVENTION REPORTS AND NOTIFICATION OF ALL SUBCONTRACTS FOR EXPERIMENTAL, DEVELOPMENTAL, OR RESEARCH WORK (OCT 1999)

(a) This contract contains the FAR 52.227-11 "Patent Rights--Retention by the Contractor (Short Form)" clause (including the DFARS 252.227-7039 "Patents--Reporting of Subject Inventions", and 252.227-7034, "Patents--Subcontracts" clauses), the FAR 52.227-12 "Patent Rights--Retention by the Contractor (Long Form)" clause, or the FAR 52.227-13 "Patent Rights--Acquisition by the Government" clause.

(b) Under these clauses, the Contractor is required to submit interim and final invention reports and notification to the Government of all subcontracts for experimental, developmental, or research work. The interim and final invention reports and notification of all subcontracts for experimental, developmental, or research work may be submitted on DD Form 882 "Report of Inventions and Subcontracts."

(c) The Contractor shall submit interim and final invention reports and notification of all subcontracts for experimental, developmental, or research work, including negative reports, to: Office of Patent Counsel Attn: James A. Ward, SPAWARSYSCEN Code D0012,53510 Silver Gate Avenue,San Diego, CA 92152-5765

(d) The Office of Patent Counsel designated above will represent the Contracting Officer with regard to invention reporting matters arising under the contract.

H-900 STANDARD COMMERCIAL WARRANTY

The contractor shall extend to the Government the full coverage of any standard commercial sale, provided such a warranty is available at no additional cost to the Government. Acceptance of the standard commercial warranty does not waive the Government's rights under the "Inspection" clause nor does it limit the Governments rights with regard to the other terms and conditions of the contract. In the event of a conflict, the terms and conditions of the contract shall take precedence over the standard commercial warranty. The standard commercial warranty shall begin upon final acceptance of the applicable material and/or services listed in the schedule.

The contractor shall provide a copy of its standard commercial warranty (if applicable) with its offer. The warranty covers a period of Months (Offeror is to insert number).

H-901 EQUIPMENT WARRANTY

MANUFACTURERS WARRANTY-- HIGH PERFORMANCE MODEM & RELATED INTERFACE EQUIPMENT

Two Year Manufacturers Warranty. The warranty shall be 24 months from government acceptance of equipment. Government acceptance shall be defined as the time of equipment installation, immediately after the manufacturers representative has validated the system warranty. In the specific case where a system is placed in storage, the warranty shall be 30 months from government receipt of equipment. The

contractor shall provide warranty maintenance support on-board ship ~~or shall provide a point of destination for the return of a failed LRUs~~.. If the warranty does not provide for shipboard personnel to fault to an LRU level, the Navy shall have the option of returning the unit or waiting until the next ship port-of-call. In the situation of a U.S. Navy Ship requiring warranty service at sea, U.S Navy personnel or a designated SPAWAR representative shall be authorized to perform required repairs. Repair work performed by U.S Navy personnel and/or a designated SPAWAR representative shall not invalidate the Manufacturers Warranty.

NON-MANUFACTURERS WARRANTY -- SATURN-BM TERMINAL/ANTENNA HANDOVER

Provide non-manufacturers Warranty. As required, the supplemental non-manufactures warranty shall continue warranty coverage for Saturn-Bm terminals and integrated antenna handover units. For currently installed equipment, the warranty period shall be based on the time remaining on the existing manufactures warranty from government acceptance of the installed High Performance Modem & related interface equipment. For new Saturn-Bm terminals and antenna handover units that have not been installed, the warranty shall be 24 months from government acceptance of equipment. Government acceptance shall be defined as the time of equipment installation, immediately after the manufactures representative has validated the system warranty. The contractor shall provide warranty maintenance support on-board ship ~~or shall provide a point of destination for the return of failed LRUs~~. If the warranty does not provide for shipboard personnel to fault to an LRU level, the Navy shall have the option of returning the unit or waiting until the next ship port-of-call. In the situation of a U.S. Navy Ship requiring warranty service at sea, U.S. Navy personnel or a designated SPAWAR representative shall be authorized to perform required repairs. Repair work performed by U.S Navy personnel and/or a designated SPAWAR representative shall not invalidate the Non-Manufacturers Warranty.

SUPPLEMENTAL WARRANTY-- HIGH PERFORMANCE MODEM & RELATED INTERFACE EQUIPMENT

Multi-Year Extended Warranty. The supplemental warranty shall provide an extended warranty offered in one year increments (parts and labor) to repair or replace High performance Modems and related interface equipment. The contractor shall provide warranty maintenance support on-board ship ~~or shall provide a point of destination for the return of failed LRUs~~. If the warranty does not provide for shipboard personnel to fault to an LRU level, the Navy shall have the option of returning the unit or waiting until the next ship port-of-call. In the situation of a U.S. Navy Ship requiring warranty service at sea, U.S. Navy personnel or a designated SPAWAR representative shall be authorized to perform required repairs. Repair work performed by U.S Navy personnel and/or a designated SPAWAR representative shall not invalidate the extended warranty.

(b) The offeror--

(1) is encouraged to identify and propose alternatives to specifications and standards cited in this solicitation;

(2) may submit a proposal to the Contracting Officer that, as a minimum, consists of--

(i) a copy of the proposed alternatives;

(ii) a comparison of the proposed alternatives to the specification or standards cited in the solicitation; and

(iii) an analysis supporting the feasibility and cost-effectiveness of the proposed alternatives.

(c) The government will, to the extent practicable, evaluate the acceptability of any proposed alternative. If an alternative proposal is not considered for the instant procurement, it will be considered for future procurements. If the Contracting Officer does not accept the offeror's proposed alternative, the offeror agrees to perform in accordance with the specified requirements.

L-317 SUBMISSION OF PROPOSALS (COMPLEX)

If you want to compete for the contract described in Sections A through J of this Request for Proposals (RFP), you must (a) submit an offer, (b) submit specified pricing information, (c) submit written technical capability information and (d) offerors meeting the minimum technical requirements in the written submission will participate in a mandatory demonstration with our source selection evaluation board. We will consider how well you complied with these instructions when evaluating your capability. We will consider any failure to comply with these instructions to be indicative of the kind of performance that we could expect from you during contract performance. Please contact the negotiator or contracting officer by telephone, email, or in writing if you do not understand any part of these instructions.

1. Proposals shall be prepared and submitted as follows:

Volume I, Offer/Contractual (No page limitation)
Volume II, Price/Cost Information (No Page Limitation). Offeror shall also submit one copy to cognizant DCMC office and one copy to cognizant DCAA office.
Volume III, Written Capability Information (Technical):
Page Limitation: ~~60~~ 85 pages; however, the Pre-Planned Product Improvement IAW SOW para. 3.10.4 is limited to 10 pages. Note: Technical manuals are not included in the 60 page limitation.

2.0 Format

(a) Each volume must be clearly marked and contain sufficient information to permit a detailed evaluation. Data previously submitted, if any, will not be used in the evaluation of your response to this Request for Proposals. Previously submitted data shall not therefore be included in your proposal "by reference".

4.3 **VOLUME III - WRITTEN CAPABILITY INFORMATION (Technical) shall consist of the offeror's understanding of the technical requirements, and how the offeror complies with those requirements. Offers which do not present sufficient information to permit a complete technical evaluation by the Government may be rejected. Each technical proposal shall include the following:**

Section A – **(PHASE ONE) Minimum technical requirements**

(1) Each offeror shall submit the information required by Clause L-322, DESCRIPTIVE LITERATURE and L-323, REQUIREMENT FOR TECHNICAL PROPOSAL of this solicitation. Information submitted in accordance with this clause shall be utilized to determine the required compliance with the minimum requirements identified in Attachment One (1) of this solicitation. (Refer also to Clause L-321, COMPLIANCE TO MINIMUM SPECIFICATIONS of this solicitation.)

(PHASE TWO) Mandatory Demonstration

Offerors meeting the minimum technical requirements will then be required to demonstrate the system interoperability and performance requirements in Phase Two to the evaluation. Phase Two will consist of an "On-Site" Evaluation hosted by the offeror for certain requirements that would be difficult to evaluate in a written proposal. All demonstrations will be in accordance with **Attachment 4**, "Technical Evaluation Demonstration."

The On-Site Demonstration will take no more than ~~nine (9)~~ one-hundred and twenty (120) hours beginning with the arrival of the evaluation team. Offerors will not be allowed to videotape the demonstrations. Demonstrations will be scheduled as soon as practicable after evaluation of the written portion of the proposal. The order in which offerors will perform their demonstrations will be determined by a drawing of lots by the contact specialist and witnessed by the contracting officer. Once a date and time for the demonstration is coordinated between the offeror and the Government, requests from offerors to reschedule the date and time of their demonstration will not normally be entertained; however, the Government may choose, at its discretion, to grant the request. Unsuccessful requests for rescheduling of the demonstration shall not be judged by the Government to be a valid basis for protest.

Section B - **Past Performance**

(a) Offerors shall provide information on a minimum of three (3) previous Government contracts whose effort was relevant to the effort required by this solicitation; the contracts provided should have been performed within the last 5 years. If the Offeror has not had three (3) Government contracts within the last 5 years, information on relevant subcontracts and/or commercial contracts may be submitted instead. This information shall be provided by the submission of Attachment 7 - "Reference Information Sheet" for each contract.

(b) In addition to the information requested above, offerors shall contact their past performance references and request that each reference complete Attachment 6 - Past Performance

L-335 ESTIMATED EFFECTIVE AWARD DATE (OCT 1999)

For Bidding/Proposal purposes the estimated effective date of contract award is 12 June 2002.

L-340 RIGHTS IN COMPUTER SOFTWARE - LICENSE AGREEMENT (OCT 1999)

Any contract resulting from this solicitation will be governed by DFARS 252.227-7014, Rights in Noncommercial Software and Noncommercial Computer Software Documentation (JUN 1995), included in Section I of this solicitation. The DFARS clause applies unless the successful offeror adequately asserts as part of the proposal that (1) the computer software and computer software documentation deliverable under the contract is a commercial product as defined in paragraph (a)(1) of said clause, and (2) a proposed Commercial License Agreement, with terms and conditions, is consistent with normal industry/Government practices.

L-322 DESCRIPTIVE LITERATURE (JUL 1999)

NOTE TO OFFERORS: Descriptive literature is required to evaluate the technical acceptability of an offered product.

1. "Descriptive Literature" means information (e.g., cuts, illustrations, drawings, and brochures) that is submitted as part of a proposal. Descriptive literature is required to establish, for the purpose of evaluation and award, details of the product offered that are specified elsewhere in the solicitation and pertain to significant elements such as (1) design; (2) materials; (3) components; (4) performance characteristics; and (5) methods or manufacture, assembly, construction, or operation. The term includes only information required to determine the technical acceptability of the offered product. It does not include other information such as prospective contractor for operating or maintaining equipment.

2. Descriptive literature, required elsewhere in this solicitation, must be (1) identified to show the item(s) of the offer to which it applies and (2) received by the time specified in this solicitation for receipt of proposals. Failure to submit descriptive literature on time may result in rejection of the proposal, except that late descriptive literature sent by mail may be considered under the Late Submissions, Modifications, and Withdrawals of offers provision of this solicitation.

3. The failure to provide descriptive literature that shows that the product offered conforms to the requirements of this solicitation may result in rejections to the offer.

4. Statements that the proposed equipment meets the specifications or terms such as standard industry procedures or restating the specifications will not be considered sufficient.

L-323 REQUIREMENT FOR TECHNICAL PROPOSAL (OCT 1999)

Each offeror shall submit technical proposals to enable the Government to make a thorough evaluation and arrive at a sound determination as to whether or not the proposed equipment will

3.10.2 INSTALLATION SERVICES

Installation services shall include the foundation modifications; bulkhead penetrations, cable runs, and cable connectorization required in support of High Performance Modems and related interface equipment.

3.10.3 TECHNICAL SERVICES

Technical services shall include shipboard repair services defined to include troubleshooting, LRU replacement and system checkouts.

3.10.4 PRE-PLANNED PRODUCT IMPROVEMENT

The contractor shall propose a pre-planned product improvement engineering proposal that demonstrates that the proposed equipment has the capability of supporting non-channelized satellite service by modifying the proposed equipment's software or firmware. The engineering proposal shall provide the basis for a pre-planned product improvement equipment modification. Non-channelized service concept is that the Navy procures bulk space segment in each ocean area, rather than ordering individual channels, with the Navy managing access to that space segment. As defined in SPAWAR Systems Command satellite lease services contract N00039-02-D-2301, Stratos Mobile Networks, 6901 Rockledge Drive, Suite 900, Bethesda, MD 20817, the goal of this "non-channelized service" is to provide the Navy with more flexibility in tailoring space segment allocations to meet mission requirements. The engineering proposal for hardware modification shall be based on supporting the non-channelized service statement of performance objectives given in Attachment B.

3.11 TASK ORDER REPORTING

The contractor shall provide contract and project status including equipment delivery schedules, delivery order status, technical issues, quality control, deficiencies, warranty failure tracking and repair, depot support, outstanding actions and funding expenditures when specified in each delivery/task order.

3.12 CONTRACT SUPPORT CONFERENCES

The contractor shall be required to host conferences, reviews and audits to ensure a firm understanding of the contract and program requirements

3.13 WARRANTY STATUS

3.13.1 HIGH PERFORMANCE MODEM EQUIPMENT STATUS

Applications for copies should be addressed to European Committee for Electrotechnical Standardization (CENELEC), Rue De Stassart 35, Bruxelles, B-1050, Belgium.

2.4 Order of Precedence: In the event of a conflict between the text of this document and the references cited herein, the text of this document takes precedence. Nothing in this document however, supersedes applicable laws and regulations unless a specific exemption has been obtained.

3. REQUIREMENTS

3.1. Item Definition: The integrated High Performance Modem and related interface equipment shall augment the INMARSAT Type Approved, CN-17 Approved Nera Saturn-Bm configuration. Operating in conjunction with the Saturn-Bm terminal, the designated hardware shall provide mobile communications capabilities for Naval applications over the INMARSAT Lease Satellite Constellation. The Saturn-Bm terminal with the integrated High Performance Modem and related interface shall be capable of communicating reliably with the INMARSAT CN-17 compliant Coast Earth Stations (CES) in both the 128kbps and 64kbps enhanced service modes. In addition, the high performance modem and related interface equipment shall not inhibit nor degrade the existing functionality of the Saturn-Bm terminal including antenna handover operation.

3.1.1. Interface Definitions: The integrated High Performance Modem and related interface equipment for augmenting the INMARSAT Type Approved, CN-17 Approved Nera Saturn-Bm terminal shall provide the following functional interfaces.

System Interface: An interface unit capable of processing the Saturn-Bm Antenna's or antenna handover unit's L-band transmit and receive frequencies for data communications via the High Performance Modem. The required interface shall neither inhibit nor degrade the uplink and downlink antenna control frequencies between the antenna or antenna handover unit and Main Control Unit (MCU). Additionally, the interface shall neither inhibit nor degrade the power supplied by the MCU that is required to stabilize the antenna. In relation to the integrated High Performance Modem , the RF interface unit can be supplied as either an internal or external add-on to the modem or some combination thereof.

Ship's Power/Frequency Input: 115VAC ±10%, 60Hz ±5%

Data Interface: Reconfigurable from RS-232 to EIA-530, serial data port~~, Hayes Compatible commands~~.

3.2. Characteristics: The integrated High Performance Modem and related interface equipment configuration shall be in accordance with the performance and physical characteristics specified in sections 3.2.1. and 3.2.2.

annotate the observed results as satisfactory or unsatisfactory and then sign and date the appropriate block in enclosure (1) after each visual verification test is complete. The lead government Representative shall then sign and date the appropriate block in enclosure (1).

3.2.2 To validate the 64kbps enhanced service, the offeror shall use the same phase two configuration as was used to demonstrate the 128kbps enhanced service. The configuration shall consist of three Saturn-Bm terminals with High Performance Modems & related interface equipment. Each system test setup shall adhere to Figure 1. Two systems shall be configured for 64kbps enhanced service. The third system shall be configured for 128kbps connectivity. For the enhanced 64kbps service, relative signal amplitudes shall be compared for equivalence to ensure each required service is operating at the required power level (21.9dBW in the forward direction). Signal level amplitudes shall be visually approximated on a spectrum analyzer. During the test, the Land Earth Station shall be contacted to verify that the enhanced 64kbps service and enhanced 128kbps service are operating at the required power levels. Two adjacent 100KHz channels shall be provided for testing. One of the 100KHz channels shall support two 64kbps enhanced lease channel operating in 50KHz each. Once data connectivity is established on all three systems, two 64kbps enhanced leases and one 128kbps enhanced lease, the BERT operating on the 50KHz channel (enhanced 64kbps lease service) that is segmented between the other 50KHz channel and 100KHz channel shall be monitored periodically for system performance.

a. With two systems configured to support enhanced 64kbps service and one system configured to support 128kbps connectivity, offeror shall establish three simultaneous data sessions, two 64kbps and one 128kbps. After each of the BERT's are visually verified to be in sync with data flowing, and the LESO has been contacted and has provided verbal verification that terminal transmit power and shore station transmit power are within specification for enhanced 64kbps and enhanced 128kbps service, the lead government representatives shall record the test start time and the sign and date the appropriate block in enclosure (1). The duration of the test is 24-hours.

b. During the 24-hour link quality test, the offeror shall have a spectrum analyzer set-up to display the two adjacent 100KHz channels. The analyzer shall be connected to the directional coupler as depicted in figure 1. Spectrum analyzer should be set-up to display a 500KHz span that encompasses the two adjacent 100KHz channels. The government representatives shall visually verify that three adjacent carriers, two 64Kbps and one 128Kbps, are present in 200KHz of contiguous bandwidth. The government representatives shall also visually verify that the relative signal peak amplitudes for this link quality test are approximately the same for each carrier. In addition, the government representatives shall visually verify that the 64kbps carrier, when measured at the 3db point resides within 50KHz. For 50KHz visual verification, the spectrum analyzer shall be set-up to display a 100KHz span that encompasses the center channel with an amplitude scale setting of 2dB/DIV (logarithmic scale). The lead government Representative shall then annotate the observed results as satisfactory or unsatisfactory and then sign and date the appropriate block in enclosure (1) after each visual verification test is complete. The lead government Representative shall then sign and date the appropriate block in enclosure (1).

c. After the conclusion of the 24-hour link quality test, the government representatives shall visually verify that the measured bit error rate is 10^{-6} or less as displayed on the BERT connected to the system operating on the center channel at the offerors facility. For the BERT supporting data connectivity on the center channel at the LESO's facility, the government shall contact the appropriate LESO personnel to verify that the measured average bit error rate is 10^{-6} or less. The lead government Representative shall then annotate the observed results as satisfactory or unsatisfactory and then sign and date the appropriate block in enclosure (1) after each visual verification test is complete. The lead government Representative shall then sign and date the appropriate block in enclosure (1).

3.3 Antenna Hand-over Interoperability Requirements

3.3.1 Phase three configuration shall consist of the Saturn-Bm terminals and antenna handover test setup (Figure 2 diagram) with the High Performance Modem and related interface equipment installed and operational. Please note that the Government is not requiring the offeror to install the SLIP ring modification on either of the Saturn-Bm MK-II antennas that are required for antenna hand-over testing. The demonstration can be accomplished in lieu of the SLIP ring modification. If requested by prospective offerors, the Government

shall make available DAS unit(s) on temporary loan. One DAS unit shall be provided per offeror under the following conditions: 1) The prospective offeror shall be required two provide two of the three INMARSAT Serial Numbers (ISNs) from the contractor furnished Saturn-Bm terminals required to support the demonstration. The ISN shall be used to acquire the corresponding opening key code to support the DAS unit. 2) After the receipt of hardware and corresponding firmware keycode, the offeror shall be required to notify the government within 3-days of any problems with the DAS unit. If problems are uncovered, the government reserves the right to provide the offeror a replacement unit. If no problems are reported the Contractor excepts all responsibility for operating and supporting the DAS during the required demonstration. The offeror shall demonstrate that the minimum required handsets functions are available during stand-alone mode when both systems are configured to operate independently, and when the antenna handover unit is active and both systems are configured for antenna handover operation. Additionally, the offeror shall demonstrate that the proposed equipment is capable of operating during an antenna hand-over evolution. Using the test configuration setup in Figure 3, a synchro-transmitter/receiver shall be used to simulate a shipboard gyro providing Own Ships Heading, 60 Hz information. The Government furnished synchro tester shall be provided at time of demonstration. Upon completion of the testing, the Government shall retain custody of the synchro tester.

a. The government representatives shall verify that the test configuration, required equipment, and specified cable lengths, are in accordance with the prescribed requirements. The lead government Representative shall then sign and date the appropriate block in the phase III antenna handover interoperability table in enclosure (1).

b. With each Saturn-Bm terminal configured for stand-alone operation and the antenna handover unit set for standalone operation, the offeror shall demonstrate the minimum required hand set functions are available during stand-alone mode on the Saturn-Bm unit designated as the main (unit-A). The government representatives shall validate that BERT is in synch at a data rate of 128kbps. Once the data link is verified, the government representatives shall verify operation of all applicable handset functions listed in the in the phase III antenna handover interoperability of enclosure (1). The lead government Representative shall then annotate the observed results as satisfactory and unsatisfactory and then sign and date the appropriate block in enclosure (1) after each functional verification test is complete.

c. With each Saturn-Bm terminal configured for stand-alone operation and the antenna handover unit set for standalone operation, the offeror shall demonstrate the minimum required hand set functions are available with no data connection established (idle mode) on the Saturn-Bm unit designated as the main (unit-A). The government representatives shall verify operation of all applicable handset functions listed in the in the phase III antenna handover interoperability of enclosure (1). The lead government Representative shall then annotate the observed results as satisfactory and unsatisfactory and then sign and date the appropriate block in enclosure (1) after each functional verification test is complete.

d. With each Saturn-Bm terminal configured for antenna hand-over operation and the antenna handover unit set for hand-over operation, the offeror shall demonstrate the minimum required hand set functions are available prior to commencing an antenna handover evolution on the Saturn-Bm unit designated as the main (unit-A). The government representatives shall validate that BERT is in synch and data link of 128kbps is established. Once the data link is verified, the government representatives shall verify operation of all handset functions listed in the phase III antenna handover interoperability of enclosure (1). The lead government Representative shall then annotate the observed results as satisfactory and unsatisfactory and then sign and date the appropriate block in enclosure (1) after each functional verification test is complete.

e. With each Saturn-Bm terminal configured for antenna hand-over operation and the antenna handover unit set for hand-over operation, the offeror shall demonstrate the minimum required hand set functions are available with no data connection established (idle mode) prior to commencing an antenna handover evolution on the Saturn-Bm unit designated as the main (unit-A). The government representatives shall verify operation of all applicable handset functions listed in the phase III antenna handover interoperability of enclosure (1). The lead government Representative shall then annotate the observed results as satisfactory and unsatisfactory and then sign and date the appropriate block in enclosure (1) after each functional verification test is complete.

MATERIAL LIST

ITEM	QTY	ITEM NAME	PART, TYPE OR MODEL NUMBER	MANUFACTURER NAME/NSN NUMBER	REMARKS
1	3	ANTENNA, Bm ADE MK2	QUFF 911 09-3	NERA TELECOMUNICATIONS	Contractor Furnished SEE FIG 1 & 2
2	3	COUPLER, DIRECTIONAL	3002-20	NARDA	Contractor Furnished SEE FIG 1 & 2
3	2	SPECTRUM ANALYZER	HP8563E OR EQUIV.	HEWLETT PACKARD	Contractor Furnished SEE FIG 1 & 2
4	1	DUAL ANTENNA SWITCH	101438	NERA TELECOMMUNICATIONS	~~Contractor~~ Gov't Furnished * SEE FIG 2
5	500ft Total **	CABLE, FLEXIBLE, COAXIAL, 50 OHMS	RG/214	M17/164-00002	Contractor Furnished SEE FIG 1 & 2
6	12	CONNECTOR, N-SERIES RF	KN-59-176	KINGS, M39012/01-0005	Contractor Furnished SEE FIG 1 & 2
7	2	CABLE, M/M DB9	EDN12H-0005-MM	BLACK BOX	Contractor Furnished SEE FIG 2
8	3	MCU	QUFC 911 901-2	NERA TELECOMMUNICATIONS	Contractor Furnished SEE FIG 1 & 2
9	3	POWER SUPPLY 10-34VDC	QUFC 911 903-2B	NERA TELECOMMUNICATIONS	Contractor Furnished SEE FIG 1 & 2
10	3	HAND SET	QDGS 911 903	NERA TELECOMMUNICATIONS	Contractor Furnished SEE FIG 1 & 2
11	2	CCA, GYRO	QROF2199003	SEATEL	Contractor Furnished SEE FIG 1, 2 & 3
12	2	XFMR, 115 AC TO 15 DC	112561	SEATEL	Contractor Furnished SEE FIG 3
13	3	CONNECTOR, TNC-SERIES RF	KA-51-19	KINGS	Contractor Furnished SEE FIG 1 & 2
14	3	BERT, W/RS-530 OPTION	FIREBERD 6000A	TELECOMMUNICATIONS TECHNIQUES CORPORATION	Contractor Furnished SEE FIG 1 & 2 Interface to be determined by test facility.
15	20ft Total	CABLE, GYRO INTERFACE	LS2SU-3 OR SIMILAR	JCH WIRE &CABLE	Contractor Furnished SEE FIG 3
16	1	SYNCHRO TESTER	1998308	CARBONARA LABS	Gov't furnished SEE FIG 3 ***

* Government shall make available the DAS on temporary loan. After the receipt of hardware, the prospective offeror shall be required to notify the government within 3-days of any problems with the DAS unit. If problems are uncovered, the government reserves the right to provide the prospective offeror a replacement unit. If no problems are reported the Contractor excepts all responsibility for operating and supporting the DAS during the required demonstration.

** See Figures 1 & 2 For Required Cable Lengths

*** Government shall provide the Synchro Tester on temporary loan at time of demonstration.

TABLE 1.

Technical Review Table (Phase II)

Offeror : _____ System Tested: _____

PHASE II System Interoperability System Performance Requirements				
Reference	**Required Function**	**Demonstration Criteria**	**Rating: SAT or UNSTAT**	**Signature/Date**
CATDEP Para 3.2.1.a.	**Demonstration Configuration** Provide basis for system performance testing	**Equipment Configuration** Verify that the test configuration, equipment and specified cable lengths are in accordance with requirements listed in Figure 1 and table 1.		
CATDEP Para 3.2.1. b. Func Spec Para 3.2.1.3 Para 3.2.1.9 Para 3.2.1.12 INMARSAT SDM	**Standard 64K Lease Service** Legacy service will be required during transition to 128kbps lease service	**64Kbps Performance-legacy** Verify 64Kbps performance in the presence of adjacent channels providing 128Kbps With all three BERT's verified in synch with data connectivity established. 1) LESO confirmation of 64kbps legacy power levels. 2) LESO validation that terminal transmit power and Shore transmit power are in specification for 128kbps service.3) Record ~~1~~24-hour test start time.	1) LESO Verbal Confirmation 2) LESO Verbal Validation 2) Test Start Time. _____	
CATDEP Para 3.2.1.c. Func Spec Para 3.2.1.3 Para 3.2.1.9 Para 3.2.1.12 INMARSAT SDM	**Standard 64K Lease Service** Legacy service will be required during transition to 128kbps lease service	**64Kbps Performance-legacy** Verify 64Kbps performance in the presence of adjacent channels providing 128Kbps With all three BERT's verified in synch with data connectivity established. 1) Visually verify that 3 carriers are present in 300KHz of contiguous bandwidth. 2) Visually verify that the three signal peak amplitudes are approximately equivalent. 3) Visually verify that the 128Kbps carrier resides within 100KHz.		
CATDEP Para 3.2.1 d. Func Spec Para 3.2.1.3 Para 3.2.1.9 Para 3.2.1.12 INMARSAT ~~SDM~~	**Standard 64K Lease Service** Legacy service will be required during transition to 128kbps lease service	**64Kbps Performance-legacy** Verify 64Kbps performance in the presence of adjacent channels providing 128Kbps With all three BERT's verified in synch with data connectivity established. 1) Record Test Stop time 2) Visually verify that the measured bit error rate is 10^{-6} or ~~less as displayed on the BERT~~	1) Test Stop Time. _____ 2) MES BERT	

SDM		less as displayed on the BERT monitoring the center channel. 3) LESO verification of measured bit error rate (10^{-6} or less at shore site).	3) Shore BERT	
CATDEP Para 3.2.1.e. Func Spec Para 3.2.1.3 Para 3.2.1.12 Para 3.2.1.13 ~~INMARSAT SDM~~	**Enhanced 128K Lease Service** High performance Modem and related interface equipment required to support enhanced service.	**128Kbps Performance** Verify 128Kbps performance in the presence of adjacent channels providing 128Kbps With all three BERT's verified in synch with data connectivity established. 1) LESO validation that terminal transmit power and Shore transmit power are in specification. 2) Record ~~1~~24-hour test start time.	1) LESO Verbal Validation 2) Test Start Time. _____	
CATDEP Para 3.2.1.f. Func Spec Para 3.2.1.3 Para 3.2.1.12 Para 3.2.1.13 ~~INMARSAT SDM~~	**Enhanced 128K Lease Service** High performance Modem and related interface equipment required to support enhanced service.	**128Kbps Performance** Verify 128Kbps performance in the presence of adjacent channels providing 128Kbps With all three BERT's verified in synch with data connectivity established. 1) Visually verify that 3 carriers are present in 300KHz of contiguous bandwidth. 2) Visually verify that the three signal peak amplitudes are approximately equivalent. 3) Visually verify that the 128Kbps carrier resides within 100KHz.		
CATDEP Para 3.2.1.g. Func Spec Para 3.2.1.3 Para 3.2.1.12 Para 3.2.1.13 ~~INMARSAT SDM~~	**Enhanced 128K Lease Service** High performance Modem and related interface equipment required to support enhanced service.	**128Kbps Performance** Verify 128Kbps performance in the presence of adjacent channels providing 128Kbps With all three BERT's verified in synch with data connectivity established. 1) Record Test Stop time 2) Visually verify that the measured bit error rate is 10^{-6} or less as displayed on the BERT monitoring the center channel. 3) LESO verification of measured bit error rate (10^{-6} or less at shore site).	1) Test Stop Time. _____ 2) MES BERT 3) Shore BERT	
CATDEP Para 3.2.2.a. Func Spec Para 3.2.1.3 Para 3.2.1.10	**Enhanced 64K Lease Service** High performance Modem and related interface equipment required to support enhanced service.	**64Kbps Performance** Verify 64Kbps performance in the presence of adjacent channels providing 128Kbps and 64Kbps enhanced services. With all three BERT's verified in	1) LESO Verbal Validation	

3.2.1.12 ~~INMARSAT SDM~~		synch with data connectivity established. 1) LESO validation that terminal transmit power and Shore transmit power are in specification. 2) Record ~~1~~24-hour test start time.	2) Test Start Time. _____	
CATDEP Para 3.2.2.b. Func Spec Para 3.2.1.3 Para 3.2.1.10 Para 3.2.1.12 ~~INMARSAT SDM~~	**Enhanced 64K Lease Service** High performance Modem and related interface equipment required to support enhanced service.	**64Kbps Performance** Verify 64Kbps performance in the presence of adjacent channels providing 128Kbps and 64Kbps enhanced services. With all three BERT's verified in synch with data connectivity established. 1) Visually verify that 3 carriers are present in 200KHz of contiguous bandwidth. 2) Visually verify that the three signal peak amplitudes are approximately equivalent. 3) Visually verify that the 64Kbps carrier resides within 50KHz.		
CATDEP Para 3.2.2.c. Func Spec Para 3.2.1.3 Para 3.2.1.10 Para 3.2.1.12 ~~INMARSAT SDM~~	**Enhanced 64K Lease Service** High performance Modem and related interface equipment required to support enhanced service.	**64Kbps Performance** Verify 64Kbps performance in the presence of adjacent channels providing 128Kbps and 64Kbps enhanced services. With all three BERT's verified in synch with data connectivity established. 1) Record Test Stop time 2) Visually verify that the measured bit error rate is 10^{-6} or less as displayed on the BERT monitoring the center channel. 3) LESO verification of measured bit error rate (10^{-6} or less at shore site).	1) Test Stop Time. _____ 2) MES BERT 3) Shore BERT	

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Supplement to Amendment 0004

Revisit of Question 50

1) Q. The RFP seems to require that bidders comply with all of the minimum requirements stated in Attachment 3 in order to be qualified for overall evaluation based on the requirements of Attachment 1. In addition, a statement of compliance for all items in Attachment 3 is required. The wording under INMARSAT Authorization requires that a copy of "the non-standard lease authorization that WAS submitted to INMARSAT for achieving the operation compliance for non-standard lease service" be provided by the "OFFEROR" when, as ICTI points out in question # 50, the INMARSAT approval process does not support submitting a lease authorizations for, or receiving approvals for "operation compliance for non-standard lease service" other than that on an as required basis from a LESO when applying for a lease or and FRR for a lease. As stated, the government is therefore requiring qualified bidders to respond that they can meet this requirement in order to be compliant when it is not possible to provide the document requested by the government since it is not one used by INMARSAT to provide the approval required by the government.

- Can the government reword this requirement to be more consistent with INMARSAT policies? More appropriate wording would be
    - "Offerors shall provide copies of supporting documentation submitted to INMARSAT for achieving any INMARSAT approvals obtained from INMARSAT, and/or
    - Offerors shall provide copies of test results or reports documenting tests conducted for the purpose of achieving any INMARSAT approvals obtained from INMARSAT."

A. Please refer to the answer to question 10 of Amendment 0002 for information on INMARSAT Authorization requirements.

Attachment 1, Pg 13, Section 3.1.1

2) Q. The data interface requirement states:

"Reconfigurable from RS-232 to EIA-530, serial data port, Hayes Compatible commands."

Hayes external commands are used to communicate with the DTE port of the Saturn-B, but the Data Port of the High Performance Modem is connected to the user equipment, and not to the DTE port of the Saturn-B. Why are "Hayes Compatible commands" specified for the Data Port? Should not this part of the requirement be removed?

A. Section 3.1.1 of the Performance specification in attachment 1 has been amended. The words "Hayes Compatible commands" have been removed. See Amendment 0004.

Response to Questions to RFP N66001-02-R-5999
Supplement to Amendment 0004

Attachment 3

3) Q. Attachment 3 requires that "OFFERERS" provide a technical report indicating that the "equipment can support non-channelized service by modifying systems exiting firmware and or software" with a reference to SOW 3.10.4 which requires that "CONTRACTORS" provide a "proposal" indicating this same capability. In addition, CLINs 0020, 0043, 0089 and 0112 require repeated delivery of proposals indicating this same capability.

A. CLINs 0043, 0066, 0089, and 0112 have been amended. CLINs 0043, 0066, 0089, and 0112 have had the max quantities changed to 30. Section 3.10.4 of the SOW has been amended. The following sentence has been added: "The engineering proposal shall provide the basis for a pre-planned product improvement equipment modification".

4) Q. Is it correct to interpret these requirements such that
- The "offerer" shall state with the response to this RFP that the delivered High Performance Modem and Related Interface Equipment can be modified per Attachment B of Attachment 1 and that

The "contractor" will deliver proposals for modifications to achieve the objectives of Attachment B of Attachment 1?

A. Attachment 3, provides the minimum technical requirement criteria for the pre-planned product improvement. CLINs 0043, 0066, 0089, and 0112 are un-priced CLINs that the government has the option to invoke. The proposed equipment modification shall be based on the prospective offerors pre-planned product improvement-engineering proposal. If the govenment decides to invoke this option, equipment modification unit cost shall be negotiated at a future date with the successful offeror.

5) Q. Is the work necessary to support any of the actual modifications (not the work necessary to prepare the proposals, or deliverables via the above CLINs) beyond the scope of this procurement, or limited to the labor hours specified in CLINs 0018 and 0019 and the associated CLINs in the option years?

A. Any labor hours used under the labor hour CLINS will be used within the scope of the proposed contract. The labor hours used for each delivery order will be negotiated before the delivery order is placed.

General

6) Q. Is the government requiring that all three service types (standard, legacy lease, enhanced lease)
- All have the same operational procedures as used for standard services (dial-up, several different means of call setup), or that
- At least one common operational procedure be available for use with all services (i.e. DTR dialing, hot-dialing or the like)?

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Supplement to Amendment 0004

A. The requirement for automatic link establishment is described in Attachment 2, Function Specification, section 3.2.1.15.

7) Q. Our sources indicate that the antenna handover unit is not yet commercially available from Nera (not on parts list available to other Nera distributors). Rather than require that bidders purchase a developmental item for the demonstration, can the government agree to provide a unit that has previously been tested to the government's satisfaction for the demonstration.

A. Please refer to the answer to question 1c.of amendment 3.

8) Q. Has the antenna handover unit undergone the required INMARSAT regression tests necessary for maintaining the Type Approval/CN-17 Approval Status of the Saturn B Terminal?

A. Yes. Saturn-Bm Type approval extension for the ICU, external modem and second prime antenna unit (Dual Antenna Switch) was granted on December 3rd, 2001. The attached document is a copy of the approval extension.

Section M

9) Q. For purposes of a demonstration with ICTI, the LES will be required to use a modem that will operate with the COMTECH/EF Data SDM300L with Turbo Product Code FEC. Will US Navy provide the LES modems required to conduct the demonstration?

A. No. Attachment 4, Section 2.0 of the General Requirements states "The Offerors shall provide all equipment required for the demonstration including the High performance modems and related interface equipment required at the INMARSAT Land Earth Station to support connectivity. Exceptions are listed in the required material list in Table 1."

Attachment 3

SOW 3.3

10) Q. ICTI, in coordination with Inmarsat, has successfully conducted regression testing of the Int-L Modem (ICTI's high performance modem) with the Nera Saturn B to ensure that Type Approval and CN 17 approval remain valid using both MCU v8 (for the Stratos BEST customer MSC) as well as MCU v7.12 (for the Navy). The RFP addresses the Antenna Handover Unit (AHU), as developed for US Navy, in statements about warranty and as a component of the demonstration. ICTI has not performed regression testing of the Nera Saturn B and AHU with Int-L Modem connected, but has inquired as to the availability of the AHU, as instructed by US Navy. Through a Nera distributor, ICTI has been informed that the AHU is not commercially available, is still under going field testing and will not be commercially available until the May / June time frame. Without commercial availability of the AHU and for purposes of responding to the RFP to meet the Minimum Technical Requirements as stated in Attachment 3, SOW 3.3, how does the government expect third party vendors to;

- Determine price for a non-manufacturer warranty offering?

A. See response to question #7 of this document.

- Conduct the regression testing necessary to allow Inmarsat to respond in the affirmative to items 1 and 2 in the request for a declaration of conformance?

A. The minimum requirements for items 1 and 2 in Attachment 3, INMARSAT Authorization are stated as follows "Offerors shall provide a written declaration of conformance from INMARSAT that 1) the proposed equipment does not invalidate the existing Saturn-Bm terminal INMARSAT Type Approval, 2) the proposed equipment does not invalidate the Saturn-Bm terminal INMARSAT CN-17 Approval". The Nera Dual Antenna Switch (DAS) is not part of this requirement. See answer to question 8 in this amendment for INMARSAT Approval information on the DAS unit. If INMARSAT requires additional testing beyond the requirements set forth in the solicition, the government will work with both INMARSAT and the successful offeror after contract award to ensure any additional INMARSAT requirements are satisfied.

General: Related to Pre-Planned Product Improvement

11) Q. The RFP is silent about any requirements for configuring the external modem (frequency, data rate)

- Will the offeror be evaluated on the procedure for configuring the external modem?

A. As stated in attachment 3, Pre-planned product Improvement, the government shall be evaluating the technical report submitted by prospective offerors. The technical report for hardware modification shall be based on supporting the non-channelized service statement of performance objectives given in Attachment B. Specific configuration parameters are left up to the prospective offeror designs.

- Is the minimum requirement that the modem be configured manually?

A. See previous answer.

Section M

12) Q. The demonstration as specified, as a result of the requirement for on-air testing, is not, by any means a controlled environment in which results can be expected to be repeatable with tests separated in time by more than a week. In order for completely unbiased results to be obtained, all competing solutions should be simultaneously tested to ensure that each competitor's product is presented with the same environment to the greatest extent possible for tests in which BER performance of enhanced modem is to be measured. Obviously, if all competitors pass these time sequential tests, there are no issues to be raised. However, if one competitor should pass the test and another does not, there are a number of factors (such as intentional or unintentional interference) that may have affected one set of test results but not the other.

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Does the government have plans, or will the government modify their plans, to simultaneously conduct these critical BER performance tests?

A. Bit Error Rate (BER) performance testing of the phase two demonstration evaluations shall not be conducted simultaneously. The government would like to point out to prospective offerors that U.S. Navy ships do not operate by any means in a controlled environment. The purpose of the BER performance testing is to ensure that the proposed equipment is capable of providing the minimum required BER in the presence of adjacent channels. The government BER performance critera set forth in the solicitaion is not biased towards any prospective offeror. First, BER performance testing shall be conducted over the INMARSAT AOR-W lease satellite (98°W)which ensures that offeror's test facilities located within the continental United States shall have a favorable Mobile Earth Station (MES) look angle of greater than 30°. Second, the required space segment shall be provided from government owned space segment allocations to ensure that the only other adjacent space carriers will be legacy service which should mitigate the chance of interference from non-U.S. Navy satellite users. It is assumed that the local ambient noise environment at the prospective offerors test facility shall be no worse than the ambient noise environment aboard a operational U.S. Navy ship. Since in all likelihood, prospective offerors have already performed BER testing with their proposed hardware, each vendor should have a good understanding of existing limitations regarding the operational environment of their test facility. Finally, the offeror need only demonstrate an average bit error rate of 10^{-6} or less over a 24-hour period to pass the BER performance testing.

Section H

13) Q. In regard to the Q&A section of Amendment 0002, Q & A #2, government states that Section H-901 has been amended, specifically; "The words '...or shall provide a point of destination for the return of a failed LRU' have been removed."

Questions:

1. Does the change to H-901 the government refers to mean H-901 of Solicitation N66001-02-R-5999?

A. Yes.

2. Will there be a specific amendment; i.e. republished page; or does the answer to Amendment 0002, Q&A#2 serve as the official amendment?

A. Please see Amendment 0002, page 1 of 1, Block 14, sentence 1 for the subject specific amendment to clause H-901.

14) Q. In Amendment 0001, Q&A Attachment 2 (page 107, Section H-900, N66001-02-D-5024), the contractor, and current provider of warranty, is afforded the option to "... provide a point of destination for the return of a failed LRU."

Question: Is the government requiring, for the Non-manufacturer warranty (Section H-901 of Solicitation N66001-02-R-5999), a more restrictive warranty service from that required of the Nera Saturn B supplier under the original warranty?

Response to Questions to RFP N66001-02-R-5999
Supplement to Amendment 0004

A. Assuming the prospective offeror cannot provide a written statement from the Saturn-Bm OEM that their product does not invalidate the Saturn-Bm terminals and antenna handover manufactures warranty, the offer shall provide a plan for supporting the Saturn-Bm terminal and antenna handover unit warranty. The plan shall include information on world-wide service support and parts support. In amendment 1, the responses to questions 15 provide relevant information on manufacturer warranty support. The response to question 18 in amendment 2 provides further clarification.

15)Q. In regard to the Q&A section of Amendment 0002, Q&A # 4, government states that maintenance will not become the responsibility of the warranty provider. Question: What organization(s) provide the maintenance of the Nera Saturn B.

A. Currently, Mackay world services provide warranty maintenance support.

16) Q. In regard to the Q&A section of Amendment 0002, Q&A #23, the government states its liberty to order extended warranty for Nera Saturn B terminals. In Amendment 0001, Q&A # 20, government states; "The primary purpose of the extended warranty was to support the SCN community (new construction ships) SCN community has placed new terminals in storage of greater that 6 months prior to installation. The extended warranty would then be used to augment the difference in warranty period due to storage."

Questions:

1. Does the government expect to seek extended warranty for new installations before the expiration of OEM basic 24-month warranty?

A. No

2. Does the government intend to exercise the extended warranty option for terminals in SCN storage before the expiration of OEM basic 24-month warranty?

A. No.

17) Q.In regard to the Q&A section of Amendment 0002, Q & A#19, the government provides one answer to two questions. A thorough understanding of the warranty services offered under the current terminal contract N66001-02-D-5024 is required to develop an appropriate response to RFP N66001-02-R-5999. Question:1. What is the definition of the "principle period" as referred to in Section H-900, paragraph (a) of N66001-02-D-5024 (as supplied in Amendment 0001 Q&A Attachment 2)?

A. The last two sentences section H-900, paragraph (a) of N66001-02-D-5024 states the following: "Maintenance during the warranty period shall cover the principal period of 9 hours per day five days a week, plus 9 hours Saturdays, Sundays and Holiday. Maintenance requested and performed outside the principal period of maintenance will be reimbursed by the Government at the applicable OCOMP hourly maintenance rate. Thus, the "principle period" is the performance of warranty related work during a 9-hour period, per day, five days a week, plus Saturdays, Sundays and Holidays.

INMARSAT

Mr Harry Jacobsen
Nera Satcom AS
Marine & Mobile R&D Dept
Bergerveien 12, PO Box 91
N-1375 Billingstad
Norway

Fax: 00 47 67 24 46 21

3rd December 2001

Dear Mr Jacobsen

Extension to Type Approval: Inmarsat-B Maritime Mobile Earth Station Model : Saturn Bml

We hereby grant an Extension to the Type Approval of your MES Model 'Saturn Bml'.

The attached Type Approval Particulars reflect this Extension.

Yours sincerely,

C. JOUBARD

PP

Ian Cooper
Manager, Product Approvals
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TYPE APPROVAL PARTICULARS

Nera Satcom AS *Inmarsat-B* MES Model: Saturn Bml
Maritime Class 1 Single Channel MES
Certificate Number *3EB009*

Extension Approval
Particulars Issue No 03 / 3 December 2001

MES FUNCTIONAL DETAILS

User Services	: Lease Mode CN17
	: Voice - Duplex & Simplex
	: Facsimile - Duplex
	: Telex - Duplex & Simplex
	: High Speed Data 64 kbps & 56 kbps - Duplex
	: Data - Duplex
Antenna Types	: Nera Part Number QUFF 911 02 or QUFF 911 09

ENVIRONMENTAL CONDITIONS

BDE Temperature	: -25°C to +55°C
Power Supply	: 10 - 40 VDC
All other environmental conditions	: As per SDM

MES SOFTWARE VERSIONS

Software	: 7.00

TELEPRINTER : Skanti PCU 9000

DTE FUNCTIONAL DETAILS

Model	: Skanti PCU 9000.
Ambient Temperature	: EME and IME : +20°C to +27°C RH : 45 to 75 %
Temperature Extremes	: EME : +55°C and -35°C
	: IME : +55°C and -15°C
Relative Humidity	: 95% at 40°C
Vibration	: Worse Case 25Hz, 0.4 mm peak, up-down.

an inmarsat ventures company

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Power Supply : Normal : 230 V AC, 24 V DC

AC Max : +10 volt, +6% frequency.

AC Min : -10% volt, -6% frequency.

DC Max : +30% volt.

DC Min : -10% volt.

ALTERNATIVE DTE DETAILS

Model : CC2000

Original Equipment Manufacturer : Standard Radio Marine (SRM)

Model : M2 PC 4/50

Original Equipment Manufacturer : Hewlett Packard

ALTERNATIVE DCE DETAILS – when using s/w version 7.12

Additional Inverter Converter Unit (ICU) for external modem usage

Additional second prime antenna unit

These particulars form part of the Extension Approval letter dated 3 December 2001 and issued in accordance with any conditions therein. Certified Extension Approved for and on behalf of Inmarsat.

Signed: 3 December 2001

C. JOUBARD

PP

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